CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY

ORDER NO. 96-107
NPDES PERMIT NO. CA0038636

AMENDING WASTE DISCHARGE REQUIREMENTS FOR

EAST BAY REGIONAL PARK DISTRICT,
EAST BAY DISCHARGERS AUTHORITY, AND
UNION SANITARY DISTRICT
HAYWARD SHORELINE MARSH
HAYWARD, ALAMEDA COUNTY

California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board), finds that:

1. On December 15, 1993, the Board adopted waste discharge requirements for the East Bay Dischargers Authority (EBDA) and the Union Sanitary District (USD) (hereinafter collectively called the producers), and East Bay Regional Park District (EBRPD) (hereinafter called the discharger), to discharge wastewater to the waters of the State and the United States under the National Pollutant Discharge Elimination System (NPDES) in Order No. 93-155.

2. The discharger presently operates a 145-acre man-made marsh system including three freshwater marsh basins (85 acres) and two brackish water basins (60 acres) at Hayward Shoreline Regional Park, adjacent to the San Francisco Bay. The hydraulic capacity of the marsh system is about 20 million gallons per day (mgd). Routine operation of the marsh utilizes approximately 5 mgd of reclaimed secondary treated wastewater diverted from the adjacent EBDA discharge line as the freshwater influent sources. At the point of diversion, reclaimed wastewater is supplied by the Union Sanitary District, a member agency of EBDA.

3. Under present contractual agreements, USD currently discharges treated wastewater (42.9 million gallons per day contractual maximum) into the EBDA transport pipeline. EBDA is a Joint Exercise of Powers Agency (JEPA), the members of which separately own and operate collection and treatment facilities for domestic, commercial, and industrial wastewater. By contractual agreement, EBDA transports treated wastewater from its member agencies to its dechlorination station near the San Leandro Marina (Marina Dechlorination Facility) and thence to its deepwater outfall in Lower San Francisco Bay west of the Oakland Airport at longitude 122° 17' 42" W, latitude 37° 41' 40" N. The outfall's diffuser is located 37,000 feet from shore; it discharges 23.5 feet below the surface (MLLW); and it is designed to provide minimum initial dilution of greater than 10:1 at all times, and about 45:1 for 45% of the time. EBDA's combined discharge is governed by NPDES permit No. CA0037869 (Order Nos. 94-072 and 96-105).

4. From July 1994 through June 1995, the producers studied the effect of reduced chlorine residual on fecal coliform numbers in the effluent and receiving waters. The information contained in their report, "Justification for Fecal Coliform Effluent Limitation," indicated that there are no negative impacts on the receiving waters due to the reduction of chlorine residual and subsequent increase in the fecal coliform numbers in the effluent. The report concluded that the receiving waters in the vicinity of the EBDA outfall are not used for water-contact recreation and that the five day log mean fecal coliform density up to 500 MPN/100 ml, and 90th percentile fecal coliform value of up to 1100 MPN/100 ml in the effluent will be protective of the beneficial uses of the receiving waters. Receiving water monitoring data showed that the fecal coliform density in receiving water was generally less than 2.0 MPN/100ml when the effluent was discharged with a fecal coliform density of 500 MPN/100 ml. Therefore, the producers have requested a revision of the effluent limitation for coliform bacteria in their NPDES permit to reflect this situation.

   In 1990, the California Department of Health Services (DHS) provided clarification of beneficial use definitions of waters of the State as related to bacteriological standards. DHS recommended median fecal coliform densities of 500 MPN/100 ml, and 90th percentile fecal coliform value of up to 1100 MPN/100 ml as a criterion for limited water contact recreation. However, the receiving water monitoring data show that these densities in the effluent are protective of water contact recreation uses in the receiving waters.

5. Above mentioned report provides new information not available at the time the permit was issued which justifies application of a different coliform limit. This new information demonstrates that the proposed effluent limit will not result in a violation of water quality standards. Therefore, this proposed effluent limit does not violate the backsliding provision of sections 402(o)(1)-(3) and 303(d)(4) of the Clean Water Act.

6. The waste discharge requirements (NPDES permit) for the producers will be amended with this Order. The amended waste discharge requirements will include revised effluent limit for coliform bacteria. Since USD will operate its wastewater treatment plant at a reduced chlorine dosage after this amendment, it cannot reliably meet the effluent limitation for coliform bacteria included in the existing NPDES permit issued to the Hayward Shoreline Marsh. The producers and the dischargers have demonstrated that coliform density in the Hayward Marsh is not controlled by coliform density in USD effluent. Wildlife is believed to be the dominant source of coliform in the Hayward Marsh. Thus, the revised limit will not degrade the quality of the receiving waters.

7. The amendment of an NPDES permit is exempt from the provisions of Chapter 3 (commencing with Section 2100 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 13389 of the Water Code.

8. The dischargers and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided an opportunity to submit their written views and recommendations.

9. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that:

A. Section B.1.f. under "EFFLUENT LIMITATIONS" of Order No. 93-155 shall be amended to read as follows:

Fecal Coliform Bacteria:

The effluent shall meet the following limits of bacteriological quality: The five day log mean fecal coliform density shall not exceed 500 MPN/100 ml, and the ninetieth percentile value shall not exceed 1100 MPN/100 ml.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 17, 1996.

LORETTA K. BARSAMIAN
Executive Officer